the yellowish gills. Though apparently smooth when moist, the caps were pruinose, or fibrous-pruinose when dry. The gills, though appearing free, were rounded behind up to a very slight attachment. The brittle stem, long, hollow, and rather thin-walled, was yellow-scurfy below and mealy pruinose above, with obscure striations at the tip. The base, in some specimens, was slightly swollen. In the dried plant the gills became cinnamon color.

The spores,  $12\frac{1}{2}$  to  $15 \mu$  by  $7\frac{3}{4}$  to  $9 \mu$ , were broadly elliptical, smooth, very regularly rounded at one end, a little flattened or blunted at the other. In side view they showed a depression on one side, and thus appeared concavo-convex.

In the buttons the pileus was somewhat globular, with straight margins, appressed at first. Later the pileus became hemispherical rather than campanulate, and was finally expanded and upturned, exposing the mature brown gills. The expanded plants were 1 to 1\frac{3}{4} inch broad; the stems were 3 to 4 inches high, and slender, though proportionally thicker than in Galera or Panaeolus.

A plant so delicate as this is soon affected by hot sun. It is seen at its best on a cloudy day, or early in the morning, and is most beautiful when beaded with moisture, that clings in minute globules to the tips of the fibrils on the stem.

ALSTEAD SCHOOL OF NATURAL HISTORY, Alstead Centre, New Hampshire.

## SOME NOTES ON MOSSES, WITH EXTENSIONS OF RANGE.

## J. FRANKLIN COLLINS.

Hypnum cordifolium, Hedw. In specimens collected by Dr. R. H. True at North Haven, Maine, Sept. 2, 1900, the alar regions of the leaves of some stems show all gradations from the gradually enlarged cells of typical *H. cordifolium* to forms in which they are abruptly enlarged, making well defined auricles. The leaves of the specimens which exhibit the last mentioned character are often smaller than in the typical plant, otherwise the characters are apparently identical. The peculiarity of having the alar cells more or less abruptly inflated seems to be rather characteristic of certain stems in material which

I have examined from two other localities in Maine; Hebron (Mrs. Stevens) and Orono (Fernald).

Hypnum Richardsonii, (Mitt.) L. & J. Man. (Stereodon Richardsonii, Mitten.) Collected July 16, 1902, in a mixed cedar swamp, Fort Fairfield, Maine. In leaf characters this agrees very closely with specimens from Styria, Austria (Breidler), Norway (Lindberg) and North Wakefield, Quebec (Macoun). It has somewhat larger leaves than Dr. Richardson's plant from Great Bear Lake. In general habit, however, it does not agree as closely with the specimens mentioned above as with some collected at Houlton, Maine, in 1899 (J. F. C.) and at Barnet, Vermont (Dr. F. Blanchard) in 1886. The three New England stations here mentioned are the only records of the plant in the United States which have come to the writer's notice. The Vermont station was published in 1898. H. Richardsonii is closely related to H. cordifolium. The former differs in the somewhat pinnately arranged short branches of the fruiting plant, in the shorter costa, the abruptly enlarged alar cells and usually in the cuspidate or tapering tips of the stems and branches, due to closely imbricated leaves. The two last mentioned characters have been noticed occasionally in H. cordifolium.

MNIUM CINCLIDIOIDES, (Blytt) Hüben., often varies from most of the published descriptions in having slightly margined leaves, frequently with distinct, obtuse teeth. Costa sometimes percurrent.

CATOSCOPIUM NIGRITUM, (Hedw.) Bridel. Collected by E. F. Williams, M. L. Fernald and the writer in the gorge of the Aroostook River, New Brunswick, July 17, 1902. The specimens were finely fruited though not very abundant. This species has been reported from several places in British North America <sup>2</sup> but, so far as known to the writer, from only one locality in the United States (Montana) <sup>3</sup>. Anticosti Island, more than 250 miles to the northeast appears to be the previously reported station nearest to the one here mentioned. The gorge of the Aroostook River is within two miles of the eastern border of Maine, so that the finding of *Catoscopium* there is of special interest to students of the New England flora. *Catoscopium nigritum*, with its tiny, horizontal, dark capsules, is a well marked species of

<sup>&</sup>lt;sup>1</sup> Grout: Mosses of Vermont.

<sup>&</sup>lt;sup>2</sup> Macoun: Catalogue of Canadian Plants, Part VI: 108 (1892) & VII: 242, (1902).

<sup>&</sup>lt;sup>3</sup> R. S. Williams: Bull. N. Y. Bot. Garden 2: 364 (1902).

high alpine and arctic tendencies. Conditions as favorable for its growth as those at the New Brunswick station appear to exist in several places in northern New England and it is to be expected in such localities.

ANACAMPTODON SPLACHNOIDES, (Frölich) Bridel. This moss was originally described by Frölich and published in S. E. Bridel's Species Muscorum, Pars II (1812), as Orthotrichum splachnoides. In his Mantissa (1819) Bridel transferred the species to a new genus, Anacamptodon. For more than forty years it remained the only species in the genus, as it is now understood, and to-day it is apparently the only well-known species outside the tropics. It occurs in Europe, Asia and North America and is always regarded as a rarity. Prior to 1898 it was reported in New England only from the White Mountains of New Hampshire (Oakes) and from western Massachusetts.1 Anacamptodon splachnoides has been collected by the writer at three New England stations. One of these was discovered in 1896 in North Anson, Somerset County, Maine. The moss was finely fruited, growing around an old wound in a living Elm. It apparently fruits nearly every year at this station as specimens have been collected in fine condition several times since 1896. The other two stations are in Providence, Rhode Island. One collection was from the hollow summit of a decaying stump (July, 1893) and the other from the margin of a decaying cavity in a living maple (June, 1903). Mrs. M. L. Stevens has collected this moss in Hebron, Oxford County, Maine (Sept., 1900). A. splachnoides was reported from Vermont in 18982 and is thus known from five of the New England States. It has not been reported from Connecticut though it undoubtedly occurs there and is awaiting discovery by some of the sharp eyed collectors of that region.

BROWN UNIVERSITY.

<sup>&</sup>lt;sup>1</sup> Tuckermann and Frost's "Amherst Catalogue" p. 50 (1875) and other publications.

<sup>2</sup> Grout: Mosses of Vermont. Collected by Dr. G. G. Kennedy.